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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,237	12/30/2003	Jeong-Hoon Kim	11038-133-999	8368
24341	7590	04/26/2006	EXAMINER	
MORGAN, LEWIS & BOCKIUS, LLP. 2 PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306			NGUYEN, XUAN LAN T	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/749,237	Applicant(s) KIM, JEONG-HOON	
	Examiner Lan Nguyen	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

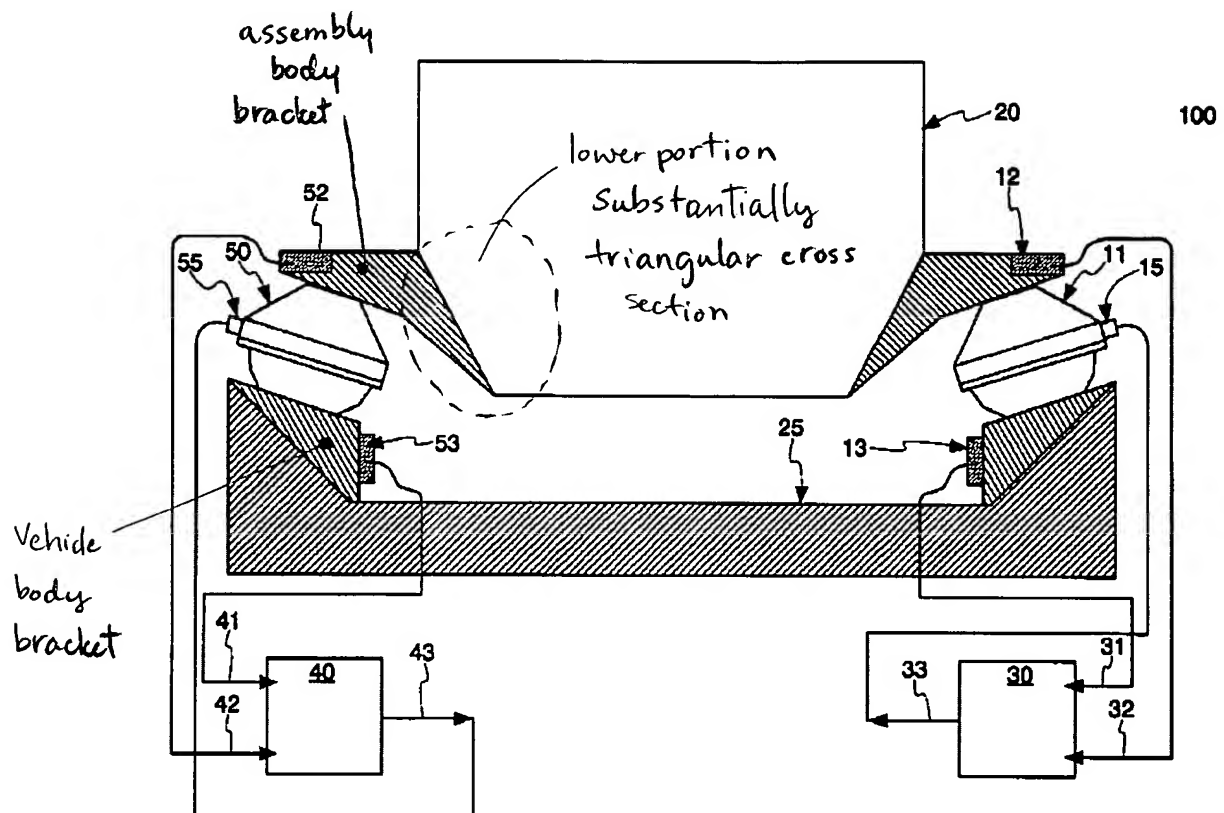
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-6 and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gade et al. in view of Kurita et al.

Re: claims 1, 4-6 and 16, Gade et al. show a vehicle mount apparatus in figure 1, as in the present invention, the apparatus comprising: a cushion member having two cushion block parts 11, 50, each symmetrically arranged about a vertical line, and positioned in the fore and aft direction relative to a vehicle body 25; vehicle body brackets, as marked below, each secured at the vehicle body 25 and contacting inclines of the two cushion block parts; as shown in figure 1; assembly body brackets, as marked below, each contacting the inclines of the two cushion block parts and mounted thereon with an assembly body 20, wherein a lower portion of each of said assembly body brackets comprises a substantially triangular cross-section, as marked below; variable stiffness means for varying the stiffness of the two cushion block parts, comprising: MR fluid filled in each cushion block part; coils 15, 55 for applying electromagnetic field to the MR fluid; sensing means 13, 53, 12, 52 for detecting the changes of accelerated velocity of a vehicle, vehicle speed and engine revolutions; and

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a controller 30, 40 for receiving a signal from the sensing means to control the stiffness of the cushion block parts. Gade further shows in column 2, lines 28 and 29 that ER and MR fluids are art equivalent working fluids in the art of active dampening control. Gade does not show power amplifiers and the concept of controlling the dampeners asymmetrically. Kurita et al. teach the situation where the bed 1b would be pitching causing the controller 100 to vary the stiffness in block 36a (fore) and block 36b (aft) asymmetrically (i.e. the stiffness of the two cushion block parts are made to be different) in order to damp the pitching vibration due to accelerations detected by sensors 40. Kurita's vehicle mount further shows amplifier 52i. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gade's apparatus to include power amplifiers and an asymmetrical stiffness controlling scheme as taught by Kurita in order to further dampen the vibration in cases where the body would pitch; therefore, further reducing the vibration of the body and providing a comfortable ride.



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Re: claim 24, Gade discloses the claimed invention except for the two cushion block parts to be integrally connected. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made Gade's two cushion block parts to be integrally connected, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U. S. 164 (1893).

Re: claims 17-22, Gade et al. show a vehicle mount apparatus, as in the present invention, the apparatus comprising: a cushion member having two cushion block parts 11, 50 in figure 1, each symmetrically arranged at an incline about a vertical line, and positioned in the fore and aft direction relative to a vehicle body 25; vehicle body brackets as marked above, said vehicle body brackets being configured and dimensioned for securing to the vehicle body 25; an assembly body bracket as marked above, comprises a plurality of assembly body brackets, opposite the vehicle body brackets, said assembly body bracket configured and dimensioned to receive an assembly body 20; variable stiffness means, MR fluid, disposed within said cushion block parts for varying the stiffness of the two cushion blocks; a sensor 13, 53, 12, 52 configured to output a signal in response to acceleration changes of the vehicle, vehicle speed and engine revolution; and a controller 30, 40 communicating with the sensor to vary the stiffness of the two cushion blocks in response the signal output by said sensor, as shown in figures 3, 4a and 4b. Gade further shows in column 2, lines 28 and 29 that ER and MR fluids are art equivalent working fluids in the art of active dampening control. Gade does not show power amplifiers and the concept of

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controlling the dampeners asymmetrically. Kurita et al. teach the situation where the bed 1b would be pitching causing the controller 100 to vary the stiffness in block 36a (fore) and block 36b (aft) asymmetrically (i.e. the stiffness of the two cushion block parts are made to be different) in order to damp the pitching vibration due to accelerations detected by sensors 40. Kurita's vehicle mount further shows amplifier 52i. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gade's apparatus to include power amplifiers and an asymmetrical stiffness controlling scheme as taught by Kurita in order to further dampen the vibration in cases where the body would pitch; therefore, further reducing the vibration of the body and providing a comfortable ride.

Re: claim 25, Gade discloses the claimed invention except for the two cushion block parts to be integrally connected. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made Gade's two cushion block parts to be integrally connected, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U. S. 164 (1893).

Re: claim 23, Gade et al. show a vehicle mount apparatus as in the present invention, comprising: a cushion member having two cushion block parts 11, 50, each symmetrically arranged at an incline about a vertical line and positioned in the fore and aft direction relative to a vehicle body 25; vehicle body brackets as marked above, contacting inclines of the two cushion block parts, said vehicle body brackets being configured and dimensioned for securing to the vehicle body 25; an assembly body

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bracket, as marked above, contacting inclines of the two cushion block parts opposite the vehicle body brackets, said assembly body bracket configured and dimensioned to receive an assembly body 20, wherein a lower portion of said assembly body bracket comprises a substantially triangular cross-section as marked above; variable stiffness means disposed within said cushion blocks for varying the stiffness of the two cushion blocks, comprising: an magneto-rheological (MR) fluid filled in each cushion block parts; coils 15, 55 each installed to apply electromagnetic fields to the MR fluid; a sensor 12, 52, configured to output an signal in response to acceleration changes of the vehicle; and a controller 30, 40 communicating with the sensor to control the variable stiffness means by varying the stiffness of the two cushion block parts in response to the signal output by said sensor, as shown in figures 3, 4a and 4b. Gade does not show power amplifiers and the concept of controlling the dampeners asymmetrically. Kurita et al. teach the situation where the bed 1b would be pitching causing the controller 100 to vary the stiffness in block 36a (fore) and block 36b (aft) asymmetrically (i.e. the stiffness of the two cushion block parts are made to be different) in order to damp the pitching vibration due to accelerations detected by sensors 40. Kurita's vehicle mount further shows amplifier 52i. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gade's apparatus to include power amplifiers and an asymmetrical stiffness controlling scheme as taught by Kurita in order to further dampen the vibration in cases where the body would pitch; therefore, further reducing the vibration of the body and providing a comfortable ride.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fujita et al. is cited for another mount arrangement with inclined cushion block parts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Lan Nguyen
Primary Examiner
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Lan Nguyen 4/24/06